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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/869,990	11/15/2001	Stuart Leon Soled	JHT-0004	4545

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EXAMINER

DOUGLAS, JOHN CHRISTOPHER

ART UNIT	PAPER NUMBER
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1764

DATE MAILED: 01/03/2006

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary	Application No. 09/869,990	Applicant(s) SOLED ET AL.	
	Examiner John C. Douglas	Art Unit 1764	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 11/15/01.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-34 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-34 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☒ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- | | |
|--|---|
| 1) <input checked="" type="checkbox"/> Notice of References Cited (PTO-892) | 4) <input type="checkbox"/> Interview Summary (PTO-413)
Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948) | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152) |
| 3) <input checked="" type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)
Paper No(s)/Mail Date <u>9/22/04+1/30/04+3/11/03</u> , | 6) <input type="checkbox"/> Other: _____ |

DETAILED ACTION

Specification

1. This application does not contain an abstract of the disclosure as required by 37 CFR 1.72(b). An abstract on a separate sheet is required.

Double Patenting

2. The nonstatutory double patenting rejection is based on a judicially created doctrine grounded in public policy (a policy reflected in the statute) so as to prevent the unjustified or improper timewise extension of the "right to exclude" granted by a patent and to prevent possible harassment by multiple assignees. A nonstatutory obviousness-type double patenting rejection is appropriate where the conflicting claims are not identical, but at least one examined application claim is not patentably distinct from the reference claim(s) because the examined application claim is either anticipated by, or would have been obvious over, the reference claim(s). See, e.g., *In re Berg*, 140 F.3d 1428, 46 USPQ2d 1226 (Fed. Cir. 1998); *In re Goodman*, 11 F.3d 1046, 29 USPQ2d 2010 (Fed. Cir. 1993); *In re Longi*, 759 F.2d 887, 225 USPQ 645 (Fed. Cir. 1985); *In re Van Ornum*, 686 F.2d 937, 214 USPQ 761 (CCPA 1982); *In re Vogel*, 422 F.2d 438, 164 USPQ 619 (CCPA 1970); and *In re Thorington*, 418 F.2d 528, 163 USPQ 644 (CCPA 1969).

A timely filed terminal disclaimer in compliance with 37 CFR 1.321(c) or 1.321(d) may be used to overcome an actual or provisional rejection based on a nonstatutory double patenting ground provided the conflicting application or patent either is shown to be commonly owned with this application, or claims an invention made as a result of activities undertaken within the scope of a joint research agreement.

Effective January 1, 1994, a registered attorney or agent of record may sign a terminal disclaimer. A terminal disclaimer signed by the assignee must fully comply with 37 CFR 3.73(b).

3. Claims 1, 2, and 3 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, or 3 of U.S. Patent No. 6620313. Although the conflicting claims are not identical, they are not patentably distinct from each other because claims 1, 2, and 3 each disclose contacting a feedstock derived from extraction with a bulk metal catalyst under hydroconversion conditions, the catalyst comprising a non-noble Group VIII metal molybdate in which at

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least a portion but less than all of molybdenum is replaced by tungsten and passing the hydroconverted stream to a second hydroconversion zone under hydroconversion conditions in the presence of a bulk metal catalyst comprising a non-noble Group VIII metal molybdate in which at least a portion but less than all of molybdenum is replaced by tungsten. The term hydroconversion includes hydrocracking processes. Claims 1, 2, and 3 do not disclose fractionating the stream leaving the hydroconversion zones. However, fractionation is well known in the art and therefore the addition of a fractionation step to the process would have been obvious.

4. Claims 4-6 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3 and 15 of U.S. Patent No. 6620313 in view of Ziemer (US 5543035). Claims 3 and 15 disclose a second hydroconversion catalyst that is a non-bulk catalyst, but do not disclose that the catalyst is a crystalline metal oxide that is a zeolite or an amorphous metal oxide that is silica-alumina. Ziemer, however, discloses a catalyst that is a crystalline metal oxide that is a zeolite or an amorphous metal oxide that is silica-alumina (see Ziemer, column 4, line 64 – column 5, line 4 and column 12, lines 28-29). The crystalline metal oxide and the amorphous metal oxide are non-bulk catalysts that are used in hydrocracking to produce lubricating oil and are well known in the art (see Ziemer, column 4, lines 46-48). Therefore, it would have been obvious to one having ordinary skill in the art at the time of the invention to modify the process of claims 3 and 15 of U.S. Patent No. 6620313 to include a non-bulk catalyst that is a crystalline metal oxide that is a zeolite or an

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amorphous metal oxide that is silica-alumina because the catalyst is well known in the art.

5. Claims 7-12 and 33 and 34 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 3-8, 27, and 28 of U.S. Patent No. 6620313. Although the conflicting claims are not identical, they are not patentably distinct from each other because 6620313 discloses claims 1, 2, and 3 (see paragraph 3) and claim 3 of 6620313 discloses the identical formula representing the bulk metal catalyst. Also, claims 3-8 of 6620313 disclose the identical molar ratios of $b:(c+d)$, the narrowest range being 0.75/1 to 1.25/1 and $c:d$, the narrowest range being 1/3 to 3/1. In addition, claims 27 and 28 of 6620313 disclose where X, representing the Group VIII non-noble metal in the formula of the bulk metal catalyst, is Ni or Co.

6. Claims 13 and 14 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2, 9 and 10 of U.S. Patent No. 6620313. Although the conflicting claims are not identical, they are not patentably distinct from each other because 6620313 discloses claims 1, 2, and 3 (see paragraph 3) and the hydrocracking conditions of claims 9 and 10 are in the range of temperatures from 300 to 480 degrees C, hydrogen pressures from 1000 to 3500 psig, liquid hourly space velocities from 0.2 to 4.0 and hydrogen treat gas rates from 1000 to 15000 scf/B.

7. Claim 15 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, or 3 of U.S. Patent No. 6620313. Although the conflicting claims are not identical, they are not patentably distinct from

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each other because 6620313 discloses claims 1, 2, and 3 (see paragraph 3) and solvent extraction to produce a raffinate rich in paraffinic hydrocarbons and an extract rich in aromatic hydrocarbons (see claims 1(a), 2(a), and 3(a)), but the extraction process occurs before the hydrocracking step instead of after the hydrocracking step in the application. However, selection of any order of performing process steps is *prima facie* obvious (see *In re Burhans*, 154 F.2d 690).

8. Claims 16, 17, and 18 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 19, 20 and 21 of U.S. Patent No. 6620313. Although the conflicting claims are not identical, they are not patentably distinct from each other because 6620313 discloses claims 1, 2, and 3 (see paragraph 3) and catalytic and solvent dewaxing, where the solvent is furfural, phenol, or N-methyl-2-pyrrolidone (see claims 19, 20, and 21).

9. Claims 19 and 20 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 2 or 3 of U.S. Patent No. 6620313. Although the conflicting claims are not identical, they are not patentably distinct from each other because 6620313 discloses claims 16 and 17 (see paragraph 8) and hydrofinishing under hydrofinishing conditions (see claims 2(e) and 3(e)).

10. Claims 21-24 rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 22 and 23 of U.S. Patent No. 6620313. Although the conflicting claims are not identical, they are not patentably distinct from each other because 6620313 discloses claims 16 and 17 (see paragraph 9) and where catalytic dewaxing uses a 10-ring molecular sieve that is a zeolite.

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11. Claims 25 and 26 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 12 of U.S. Patent No. 6620313.

Although the conflicting claims are not identical, they are not patentably distinct from each other because 6620313 discloses claims 19 and 20 (see paragraph 9) and hydrofinishing conditions that include a temperature from 200 to 370 degrees C, pressure from 150 to 3000 psig, liquid hourly space velocities from 0.2 to 5.0 and hydrogen treat gas rates from 100 to 5000 scf/B.

12. Claims 27-30 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 24 and 25 of U.S. Patent No. 6620313. Although the conflicting claims are not identical, they are not patentably distinct from each other because 6620313 discloses claims 25 and 26 (see paragraph 11) and where the hydrofinishing catalyst contains at least one Group VIII metal and where the hydrofinishing catalyst is the bulk metal catalyst.

13. Claim 31 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, or 3 of U.S. Patent No. 6620313 in view of Xiao (US 5993644). Patent No. 6620313 discloses claims 1 and 2 (see paragraph 3), but does not disclose where the lubricating oil basestocks have at least a sulfur content less than 0.03 wt%, a VI of at least 120, and at least about 90% saturates.

However, Xiao discloses lubricating oil basestocks having at least a sulfur content less than 0.03 wt%, a VI of at least 120, and at least about 90% saturates (see Xiao, column 2, lines 30-34).

Xiao mentions that this basestock is produced by hydrocracking petroleum at a pressure of 2000 psia and a temperature of 385 degrees C, which are within the operating conditions of the applicant's process (see Xiao, column 2, lines 37-43). Therefore, it is obvious that a process operated within the same conditions can yield the same product.

14. Claim 32 is rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, or 3 of U.S. Patent No. 6620313 in view of Xiao (US 5993644). Patent No. 6620313 discloses claims 1 and 2 (see paragraph 3), but does not disclose where the lubricating oil basestocks have at least a sulfur content less than 0.03 wt%, a VI of less than 120, and at least about 90% saturates.

However, Xiao discloses lubricating oil basestocks having at least a sulfur content less than 0.03 wt%, a VI of less than 120, and at least about 90% saturates (see Xiao, column 2, lines 34-36).

Xiao mentions that this basestock is produced by hydrocracking petroleum at a pressure of 2000 psia and a temperature of 385 degrees C, which are within the operating conditions of the applicant's process (see Xiao, column 2, lines 37-43). Therefore, it is obvious that a process operated within the same conditions can yield the same product.

15. Claims 1, 2, and 3 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1,2,4, and 8 of U.S. Patent No. 6162350. Although the conflicting claims are not identical, they are not patentably

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distinct from each other because 6162350 discloses contacting a feedstock derived from furfural-extracted lubricating oil, FCC tower bottoms, shale oil, or tar sand with a bulk metal catalyst under hydrocracking conditions, the catalyst comprising a nickel molybdate in which at least a portion but less than all of molybdenum is replaced by tungsten and passing the hydrocracked stream to a second hydrocracking zone under hydrocracking conditions in the presence of a bulk metal catalyst comprising a nickel molybdate in which at least a portion but less than all of molybdenum is replaced by tungsten. Claims 1, 2, 4, and 8 do not disclose fractionating the stream leaving the hydrocracking zones. However, fractionation is well known in the art and therefore the addition of a fractionation step to the process would have been obvious.

16. Claims 7-12 and 33 and 34 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claims 1, 2, 4, and 8 of U.S. Patent No. 6162350. Although the conflicting claims are not identical, they are not patentably distinct from each other because 6162350 discloses claims 1, 2, and 3 (see paragraph 15) and claim 1 of 6162350 discloses the identical formula representing the bulk metal catalyst. Also, claim 1 discloses the identical molar ratios of $b:(c+d)$, the range being 0.5/1 to 3/1 and $c:d$, the range being 0.01/1. In addition, claim 1 discloses where X, representing the Group VIII non-noble metal in the formula of the bulk metal catalyst, is Ni.

17. Claims 13 and 14 are rejected on the ground of nonstatutory obviousness-type double patenting as being unpatentable over claim 1, 2, 3, 4, and 8 of U.S. Patent No. 6162350. Although the conflicting claims are not identical, they are not patentably

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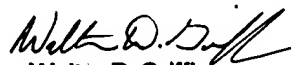
distinct from each other because 6162350 discloses claims 1, 2, and 3 (see paragraph 15) and the hydrocracking conditions of claim 3 are in the range of temperatures from 300 to 480 degrees C, hydrogen pressures from 1000 to 3500 psig, liquid hourly space velocities from 0.2 to 4.0 and hydrogen treat gas rates from 1000 to 15000 scf/B.

Conclusion

18. The prior art made of record and not relied upon is considered pertinent to applicant's disclosure: Xiao (US 5993644); O'Rear (US 6833065); Miller (US 4859311); Gruia (US 5007998); and Gortsema (US 4995964).

Any inquiry concerning this communication or earlier communications from the examiner should be directed to John C. Douglas whose telephone number is 571-272-1087. The examiner can normally be reached on 7:30 A.M. to 4:30 P.M..

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Glenn A. Caldarola can be reached on 571-272-1444. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.


Walter D. Griffin
Primary Examiner

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Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

JCD